# EARTHWORKS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

N.I.C.

| V.C. | % GRADE | STATION | ELEVATION ON TANGENT | ELEVATION ON CURVES | CORR V.C. | DIST | TOTAL EXCAVATION EARTH AND ROCK AREA | TOTAL EXCAVATION EARTH AND ROCK CU. YDS. | ROCK EXCAVATION AREA | ROCK EXCAVATION CU. YDS. | EMBANKMENT AREA | EMBANKMENT CU. YDS. | SUBBASE AREA | SUBBASE CU. YDS. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | 3.7385 % | 98+49.10 | 521.70 | | | | 0 | | | | 0 | | 0 | |
| | | | | | | .90 | | 0 | | | | | | 0 |
| | | 98+50.00 | 521.73 | | | | 9 | | | | 1 | | 5 | |
| | | | | | | 42.7 | | 7 | | | | 23 | | 9 |
| | | 98+92.70 | 523.33 | BUTT – END PATH BEGIN BRIDGE #1 | | | | | | | 28 | | 7 | |
| | | | | | | | | | C 7 | | | | | |
| 135.1' V.C. | 4.9889 % | 99+00 | | 523.68 | | | | | F 23 | | | | | |
| | | | | | | | | | SB 249 | | | | | |
| | | +50 | | 524.98 | | | | | | | | | | |
| | | +60.25 | 526.70 | | | | | | | | | | | |
| | -4.9889 % | 100 | | 524.43 | | | | | | | | | | |
| | | +27.80 | 523.33 | BUTT – END BRIDGE RESUME PATH | | | | | | | | | | |
| | | +28.00 | 523.32 | | | | | | | | | | | |
| 50' V.C. | -4.9889 % | | | | | | | | | | | | | |
| | | +50 | | 522.97 | | | | | | | 75 | | 19 | |
| | | +53.00 | 522.46 | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | +78.00 | 523.71 | | | | | | | | | | | |
| | 5.000 % | | | | | | | | | | | | | |
| 50' V.C. | | 101 | 524.57 | | | | 0 | | | | 148 | | 19 | |
| | | +03.00 | 524.96 | | | | | | | | | | | |
| | | | | | | 50 | | 1 | | | | 148 | | 33 |
| | | +28.00 | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | 0.000 % | +40 | 524.96 | | | | | | | | | | | |
| | | +45.94 | | END NEW CONSTRUCTION | | | | | | | | | | |
| 50' V.C. | | +50 | | 524.93 | | | | | | | 12 | | 17 | |
| | | | | | | | | | | | | | | |
| | | +70 | 524.96 | | | 50 | | | | | | 27 | | 31 |
| | | | | | | | | | | | | | | |
| | -3.7500 % | 102 | | 523.84 | | | 0 | | | | 17 | | 19 | |
| | | | | | | | | | | | | | | |
| | | +20 | 523.09 | | | 50 | | 9 | | | | 16 | | 34 |
| 60' V.C. | | | | | | | | | | | | | | |
| | | +50 | 521.96 | 522.28 | | | 10 | | | | 0 | | 18 | |
| | | | | | | | | | | | | | | |
| | | +80 | 522.12 | | | 50 | | 34 | | | | 3 | | 29 |
| | | | | | | | | | | | | | | |
| | | 103 | | 522.23 | | | 27 | | | | 3 | | 15 | |
| | | | | | | 50 | | 47 | | | | 0 | | 30 |
| | | +50 | | 522.49 | | | 24 | | | | 0 | | 17 | |
| | 0.5294 % | | | | | 50 | | 47 | | | | 0 | | 34 |
| | | 104 | | 522.75 | | | 27 | | | | 0 | | 20 | |
| | | | | | | 50 | | 40 | | | | 1 | | 31 |
| | | +50 | | 523.02 | | | 16 | | | | 1 | | 14 | |
| | | | | | | 50 | | | | | | 2 | | 27 |
| | | +97 | 523.29 | | | | | | | | | | | |
| 50' V.C. | | 105 | | 523.29 | | | 12 | | | | 1 | | 15 | |
| | | +22 | 523.40 | | | | | | | | | | | |
| | | | | | | 50 | | 19 | | | | | | 27 |
| | 3.6234 % | +47 | 524.31 | | | | | | | | | | | |
| | | +50 | | 524.42 | | | 9 | | | | 6 | | 14 | |
| | | | | | | | | | | | | | | |
| | | +74 | 525.28 | | | | | | | | | | | |
| | | | | | | 50 | | 15 | | | | 7 | | 26 |
| 50' V.C. | | +99 | 526.19 | | | | | | | | | | | |
| | 0.000 % | | | | | | | | | | | | | |
| | | 106 | | 525.98 | | | 7 | | | | 2 | | 14 | |
| | | | | | | 24 | | 9 | | | | 1 | | |
| | | +[illegible] | 526.19 | BUTT – EDGE TAYLOR ST. | | | 14 | | | | 0 | | 14 | |
| TAYLOR ST. | | +50 | | 525.31 | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | 106+54 | 525.17 | EDGE TAYLOR ST. | | | | | | | 0 | | 14 | |
| | | | | | | | | | | | | | | |
| | -3.3077 % | +81 | 524.28 | | | 46 | | 16 | | | | 3 | | 24 |
| | | | | | | | | | C 64 | | | | | |
| 50' V.C. | | 107 | | 523.73 | | | 5 | | F 23 | | 3 | | 14 | |
| | | | | | | | | | SB 324 | | | | | |
| | | +06 | 523.45 | | | | | | | | | | | |
| | | | | | | 50 | | 13 | | | | 4 | | 26 |
| | | +31 | 523.16 | | | | | | | | | | | |
| | | +50 | | 522.93 | | | 9 | | | | 1 | | 14 | |
| | | CARRIED FORWARD | | | | | | | | | | | | |
| | | COLUMN FOOTINGS | | | | | | 29 | | | | 7 | | 50 |

STA. 98+49.10 TO 106+24 NOT IN CONTRACT

BEGIN PROJECT

| V.C. | % GRADE | STATION | ELEVATION ON TANGENT | ELEVATION ON CURVES | CORR V.C. | DIST | TOTAL EXCAVATION EARTH AND ROCK AREA | TOTAL EXCAVATION EARTH AND ROCK CU. YDS. | ROCK EXCAVATION AREA | ROCK EXCAVATION CU. YDS. | EMBANKMENT AREA | EMBANKMENT CU. YDS. | SUBBASE AREA | SUBBASE CU. YDS. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 50 | | 21 | | | | 3 | | 30 |
| | -1.1724 % | 108 | | 522.35 | | | 14 | | | | 2 | | 18 | |
| | | +01 | 522.34 | | | | | | | | | | | |
| | | | | | | 50 | | 12 | | | | 6 | | 32 |
| | | +50 | | 522.07 | | | 1 | | | | 5 | | 17 | |
| | | +51 | | | | | | | | | | | | |
| | 1.3750 % | | | | | 50 | | 1 | | | | 6 | | 24 |
| | | +71 | 522.03 | | | | | | | | | | | |
| 40' V.C. | | | | | | | | | | | | | | |
| | | +91 | 522.30 | | | | | | | | | | | |
| | | 109 | | 522.81 | | | 1 | | | | 1 | | 9 | |
| | +5.0000% | +11 | 523.30 | | | 50 | | 1 | | | | 1 | | 39 |
| | | +50 | 525.25 | | | | 0 | | | | 0 | | 33 | |
| | | | | | | | | | | | | | | 44 |
| | | +75 | 526.50 | | | | | | | | | | 63 | |
| | | +78.2 | 526.66 | | | 40.7 | | | | | | | | 105 |
| | | +90.64 | 526.73 | BUTT – END PATH BEGIN BRIDGE | | | | | | | | | 96 | |
| | | +95.70 | 524.11 | | | | | | | | | | | |
| 167.0' V.C. | +1.7166% | 110 | | 526.91 | | | | | | | | | | |
| | | +50 | | 526.27 | | | | | | | | | | |
| | | +79.2 | 528.27 | | | | | | | | | | | |
| | 1.1425 % | 111 | | 527.31 | | | | | | | | | | |
| | | +50 | | 527.43 | | | | | | | | | | |
| | | +62.7 | 527.31 | | | | | | | | | | | |
| | | +68.64 | 527.31 | BUTT – END BRIDGE RESUME PATH | | | | | | | | | | |
| | | +70.68 | 527.22 | 527.22 | | | 64 | | | | 0 | | 76 | |
| | | STA 111+70.68 AH | | | | | | | | | | | | |
| | | =STA 111+75.60 BK | | | | | | | | | | | | |
| | | EQ. = +4.92 | | | | | | | | | | | | |
| | | | | | | 29.33 | | 72 | | | | 0 | | 84 |
| | -1.1618 % | 112 | | 526.88 | | | 69 | | | | 0 | | 78 | |
| | | | | | | 50 | | 132 | | | | 0 | | 112 |
| | | +50 | | 526.30 | | | 74 | | | | 0 | | 43 | |
| | | | | | | | | | C 550 | | | | | |
| | | +63.17 | 526.15 | | | | | | F 8 | | | | | |
| | | | | | | 50 | | 104 | SB 367 | | | 0 | | 56 |
| 50' V.C. | | +88.17 | 525.86 | | | | | | | | | | | |
| | | 113 | | 526.02 | | | 38 | | | | 0 | | 18 | |
| | | +13.17 | 526.12 | | | 50 | | 59 | | | | 0 | | 33 |
| | 1.0768 % | | | | | | | | | | | | | |
| | | +50 | | 526.52 | | | 26 | | | | 0 | | 18 | |
| | | +90 | 526.95 | | | 50 | | 44 | | | | 4 | | 30 |
| 100' V.C. | | | | | | | | | | | | | | |
| | | 114 | | 527.04 | | | 22 | | | | 4 | | 14 | |
| | | +40 | 527.49 | | | | | | | | | | | |
| | | | | | | 50 | | 53 | | | | 4 | | 26 |
| | | +50 | | 526.82 | | | 35 | | | | 0 | | 14 | |
| | | | | | | | | | | | | | | |
| | | +90 | 525.86 | | | | | | | | | | | |
| | -3.2636 % | | | | | 50 | | 86 | | | | 0 | | 26 |
| | | 115 | | 525.53 | | | 58 | | | | 0 | | 14 | |
| | | | | | | | | | | | | | | |
| | | +35 | 524.39 | | | 50 | | 107 | | | | 0 | | 30 |
| 30' V.C. | | | | | | | | | | | | | | |
| | | +50 | 523.90 | 524.02 | | | 58 | | | | 0 | | 18 | |
| | | | | | | | | | | | | | | |
| | | +65 | 523.90 | | | | | | | | | | | |
| | 0.00 % | | | | | | | | | | | | | |
| | | +75 | 523.90 | | | 50 | | 71 | | | | 8 | | 34 |
| | | | | | | | | | C 504 | | | | | |
| 30' V.C. | | +90 | 523.90 | | | | | | F 75 | | | | | |
| | | | | | | | | | SB 281 | | | | | |
| | | 116 | | 523.38 | | | 19 | | | | 9 | | 19 | |
| | -4.9455 % | | | | | | | | | | | | | |
| | | +05 | 523.16 | | | 50 | | 47 | | | | 17 | | 31 |
| | | | | | | | | | | | | | | |
| | | +50 | 520.93 | | | | 32 | | | | 9 | | 14 | |
| | | | | | | | | | | | | | | |
| | | +50.2 | 520.92 | | | 50 | | 52 | | | | 11 | | 27 |
| | | | | | | | | | | | | | | |
| | | 117 | | 519.15 | | | 24 | | | | 3 | | 15 | |
| 100' V.C. | | | | | | | | | | | | | | |
| | | +00.2 | 518.45 | | | 50 | | 44 | | | | 6 | | 28 |
| | 0.6262 % | | | | | | | | | | | | | |
| | | +50 | | 518.76 | | | 23 | | | | 3 | | 15 | |
| | | | | | | | | | | | | | | |
| | | +50.2 | 518.76 | | | | | | | | | | | |
| | | CARRIED FORWARD | | | | | | | | | | | | |
| | | COLUMN FOOTINGS | | | | | | 906 | | | | 66 | | 791 |

SUMMARY AND BALANCES

| STATION | TO STATION | TOTAL EXCAV EARTH & ROCK | ROCK EXCAV CUBIC YARDS | EMBANKMENT CUBIC YARDS | EXCESSES CUT | EXCESSES FILL | ACCUMULATIVE EXCESSES CUT | ACCUMULATIVE EXCESSES FILL | SUBBASE |
|---|---|---|---|---|---|---|---|---|---|
| BEGIN | 100+00 | 7 | | 23 | | | | | 9 |
| 100+00 | 105+00 | 179 | | 197 | | | | | 249 |
| 106+54 | 110+00 | 64 | | 23 | | | | | 324 |
| 110+00 | 115+00 | 550 | | 8 | | | | | 367 |
| 115+00 | 120+00 | 504 | | 75 | | | | | 281 |
| 120+00 | 125+00 | 206 | | 34 | | | | | 238 |
| 125+00 | 130+00 | 70 | | 12 | | | | | 110 |
| 130+00 | 135+00 | 58 | | 60 | | | | | 277 |
| 135+00 | 140+00 | 119 | | 67 | | | | | 271 |
| 140+00 | 145+00 | 176 | | 107 | | | | | 248 |
| 145+00 | 150+00 | 71 | | 103 | | | | | 343 |
| 150+00 | 155+00 | 199 | | 319 | | | | | 288 |
| 155+00 | END | 113 | | 46 | | | | | 230 |
| | | 2130 | | 854 | | | | | 2977 |

| SHEET NO. | COL. NO. | EXCAVATION TOTAL CY | EXCAVATION ROCK CY | EMBANKMENT CY | SUBBASE CY |
|---|---|---|---|---|---|
| 1 | 1 | 29 | | 7 | 50 |
| 1 | 2 | 906 | | 66 | 791 |
| 2 | 1 | 446 | | 73 | 447 |
| 2 | 2 | 291 | | 136 | 654 |
| 3 | 1 | 216 | | 521 | 699 |
| 3 | 2 | 242 | | 51 | 336 |
| | | 2130 | | 854 | 2977 |

| REMARKS | |
|---|---|
| EARTH AND ROCK EXCAVATION | 2130 |
| PAVEMENT EXCAVATION | 0 |
| EARTH EXCAVATION | 2130 |
| PLANIMETERED FILL | 854 |
| LESS FACTORED PAVEMENT | 0 |
| LESS DISPLACEMENT OF LARGE | |
| STRUCTURES | 0 |
| NET PLANIMETERED FILL | 854 |
| FACTOR 0.15 | 128 |
| PLANIMETERED FILL INCL. FACTOR | 982 |
| MATERIALS AVAILABLE FOR FILLS | |
| EARTH EXCAVATION | 2130 |
| CHANNEL EXCAVATION | 40 |
| UNDERDRAIN EXCAVATION | 0 |
| STRUCTURE EXCAVATION | 180 |
| TOTAL MAT'L AVAILABLE FOR FILL | 2350 |
| TOTAL FILL INCLUDING FACTOR | 982 |
| TOTAL MATERIAL FOR FILL | |
| BORROW | |
| EXCESS EXCAVATION | 1368 |

6829SCH6

PROJECT NAME MONTPELIER–WINOOSKI RIVER WEST BIKEWAY
PROJECT NUMBER BWM–BIKE (4)S